

To: Arctic Sun Customers
Date: April 14, 2008
From: Technical Support
Re: Alarm 71, 73, 75, or 77

Service Bulletin

Issue: An alarm #71, 73, 75, or 77 occurs during normal use. These are non-recoverable system errors relating to water temperature.

Cause: A rise in contact resistance occurs in the connection between the water temperature sensor harness and the I/O Circuit Card at J9 or J10. Since the water temperature measurement circuit uses very low voltage and current, even a small change of the resistance affects the measurement. It should be noted that the outlet water temperature is redundantly sensed and that if the two readings differ, an alarm will occur. The alarm may or may not reoccur after cycling power. The procedure below has successfully resolved the alarm in every case in which it was tried, with no reported reoccurrence.

Correction: Perform the following procedure:

1. Remove the rear panel (Service Manual Section 7.3).
2. Disconnect the black connectors at J9 and J10 on the I/O Card at the right end of the card cage. (See Figures 1 and 2 below.) Be careful to depress the locking ramp while pulling on the connector housing. It may help to rock the housing slightly side to side. Do not pull on the wires. (Service Manual Section 7.10)
3. If isopropyl alcohol is available, a small amount may be used to brush the mating contacts. Do not use commercial electrical contact cleaners as they may damage the plastic housings or circuit board components. Allow the alcohol to evaporate before reconnecting.
4. Reconnect the connectors ensuring that they fully lock.
5. Reinstall the rear panel.
6. Power up in User Diagnostic Mode. (Service Manual Section 6.1)
7. On the second line of the LCD screen, observe T1, T2, T3, and T4. Verify that they are not 0 or 99.
8. Power down.

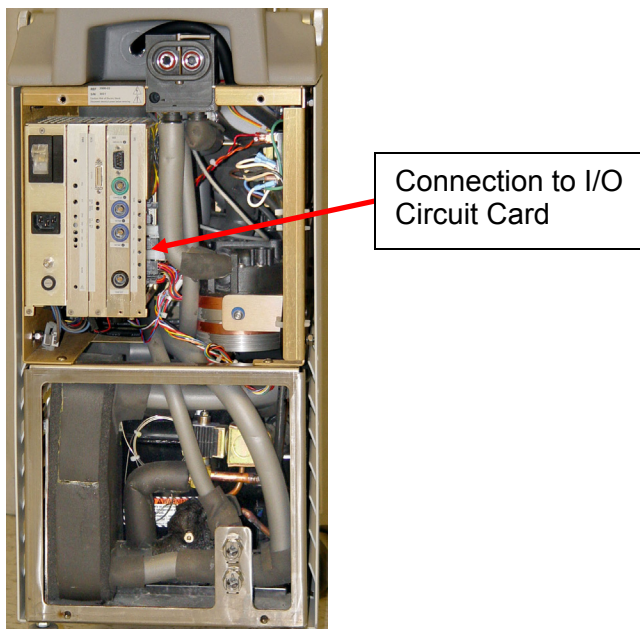


Figure 1: Connector Location in Machine

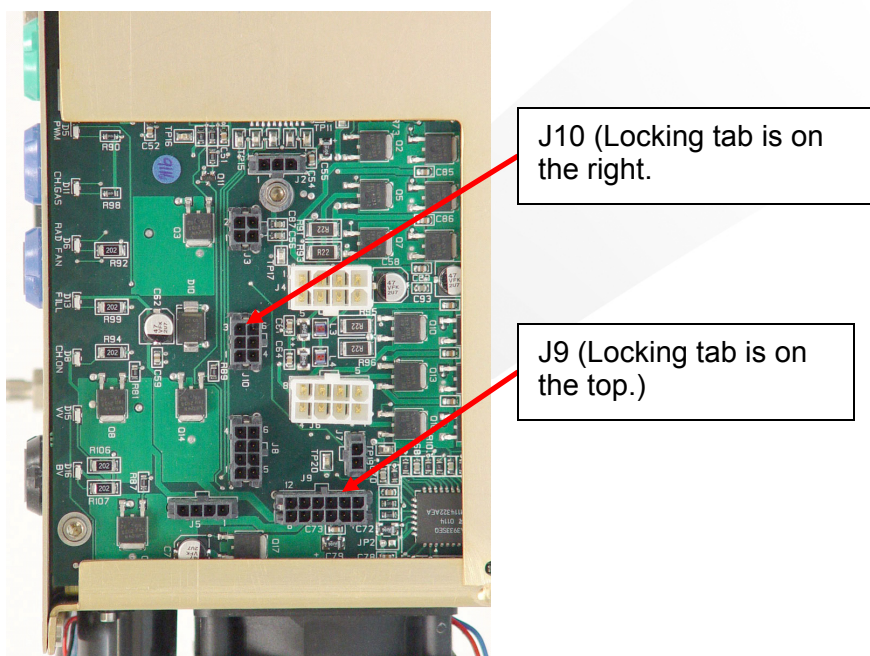


Figure 2: Connector Location on Circuit Board